#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-013291

Address: 333 Burma Road **Date Inspected:** 14-Mar-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Yu Dong Ping, Tu Jun **CWI Present:** Yes No **Inspected CWI report:** Yes No **Rod Oven in Use:** Yes No N/A N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No Yes N/A N/A **Qualified Welders:** No **Verified Joint Fit-up:** Yes No N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** Tower

## **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

Bay 11, Tower Lift 4 Strut

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT reports for this date. The members are identified as Tower Components. The weld designations reviewed are as follows.

ED1-STSA4-6-135M-1-7A/B, 8A/B

ED1-STSA4-6-135M-2-7A/B, 8A/B

ND1-STSA4-6-135M-1-7A/B, 8A/B

This Quality Assurance (QA) Inspector observed the following work in progress:

**BAY 11** 

TOWER STRUT ANGLE CONNECTION PLATE

SAW welding of weld joint 1B located on SD1-SA4-56-119M-1.

## WELDING INSPECTION REPORT

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Welder is identified as 042195. ZPMC QC is identified as Mr. Liu Dao Feng.

The welding variables recorded by QC appeared to comply with WPS-B-T-3221-Tc-U5-S-1.

#### TOWER STRUT FLANGE PLATE

SAW welding of weld joint 1B located on ED1-STSA4-6-131M-2.

Welder is identified as 040699. ZPMC CWI is identified as Yu Dong Ping.

The welding variables recorded by QC appeared to comply with WPS-B-T-4221-B-U3c-S-1.

#### WEST TOWER LIFT 5, DE CORNER SEAM

SMAW welding of weld joint 6A located on WSD1-TL5-4B/F.

Welder is identified as 046704. ZPMC QC is identified as Mr. Li Jun.

The welding variables recorded by QC appeared to comply with WPS-B-T-3211-Tc-U4b-1.

#### WEST TOWER LIFT 5, CD CORNER SEAM

SMAW welding of weld joint 38B located on WSD1-TL5-4B/F.

Welder is identified as 041271. ZPMC QC is identified as Mr. Li Jun.

The welding variables recorded by QC appeared to comply with WPS-B-T-3212-Tc-U4b-1.

## WEST TOWER LIFT 4, AB CORNER SEAM REPAIR (T-CWR603, REV. 0, Y-6650)

SMAW welding of weld joint 59A/B(Repair) located on WSTL4-2B/L.

Welder is identified as 049099. ZPMC CWI is identified as Mr. An Qing Xiang.

The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G(2F)-REPAIR.

## **BAY 10**

#### NORTH TOWER LIFT 5

SMAW welding of weld joint 19B(Repair) located on NSD1-TL5-3B/F.

Welders are identified as 052930 & 050289. ZPMC QC is identified as Mr. Yu Zhi Lai.

The welding variables recorded by QC appeared to comply with WPS-485-SMAW-1G(1F)-REPAIR-1.

This QA inspector observed that ZPMC NDT personnel were performing Magnetic Particle Testing (MT) on the temporary attachment removal area of shear plate ND1- A26. Attached photographs provide additional details.

## PHASED ARRAY ULTRASONIC TESTING (PAUT) TRAINING

This QA inspector attend the Phased Array Ultrasonic Testing (PAUT) training session organized by ASNT level III.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

# WELDING INSPECTION REPORT

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# **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest: 15000422360, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Gaikwad,Umesh	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer